

EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	1553	(alpha adj amylase\$1) same bacillus same (mutant\$1 or variant\$1)	US-PGPUB; USPAT	ADJ	OFF	2007/02/21 10:47
L2	167205	(residue\$1 or position\$1 or amino acid\$1 or muta\$6) same ("168" or "169" or "170" or "171" or "172" or "173" or "174")	US-PGPUB; USPAT	ADJ	OFF	2007/02/21 10:48
L3	1237	1 and 2	US-PGPUB; USPAT	ADJ	OFF	2007/02/21 10:49
L4	287	3 not shiroza	US-PGPUB; USPAT	ADJ	OFF	2007/02/21 10:49

11/16/00

FILE 'HOME' ENTERED AT 10:57:54 ON 21 FEB 2007

=> fil .bec
COST IN U.S. DOLLARS

FULL ESTIMATED COST

SINCE FILE ENTRY	TOTAL SESSION
0.21	0.21

FILES 'MEDLINE, SCISEARCH, LIFESCI, BIOTECHDS, BIOSIS, EMBASE, HCAPLUS, NTIS,
ESBIOBASE, BIOTECHNO, WPIDS' ENTERED AT 10:58:10 ON 21 FEB 2007
ALL COPYRIGHTS AND RESTRICTIONS APPLY. SEE HELP USAGETERMS FOR DETAILS.

11 FILES IN THE FILE LIST

```
=> s alpha(w) amylase# and bacillus and (muta? or variant#)
FILE 'MEDLINE'
```

579756

22594 AMYLASE#
5272 ALPHA (W) AMYLASE#
53988 BACILLUS
545303 MUTA?
120162 VARIANT#
213 ALPHA (W) AMYLASE#

L1 213 ALPHA (W) AMYLASE# AND BACILLUS AND (MUTA? OR VARIANT#)

FILE 'SCISEARCH'

827851 ALPHA
19317 AMYLASE#
8847 ALPHA (W) AMYLASE#
56297 BACILLUS
531007 MUTA?
134849 VARIANT#

L2 336 ALPHA (W) AMYLASE# AND BACILLUS AND (MUTA? OR VARIANT#)

FILE 'LIFESCI'

179124 ALPHA
4862 AMYLASE#
2940 ALPHA (W) AMYLASE#
28472 BACILLUS
240791 MUTA?
40738 VARIANT#

L3 134 ALPHA (W) AMYLASE# AND BACILLUS AND (MUTA? OR VARIANT#)

FILE 'BIOTECHDS'

32861 ALPHA
6253 AMYLASE#
3971 ALPHA (W) AMYLASE#
19288 BACILLUS
48660 MUTA?
16770 VARIANT#

L4 290 ALPHA (W) AMYLASE# AND BACILLUS AND (MUTA? OR VARIANT#)

FILE 'BIOSIS'

726525 ALPHA
29897 AMYLASE#
10851 ALPHA (W) AMYLASE#
74519 BACILLUS
589670 MUTA?
122080 VARIANT#

L5 265 ALPHA (W) AMYLASE# AND BACILLUS AND (MUTA? OR VARIANT#)

FILE 'EMBASE'

648979 ALPHA
17102 AMYLASE#
3841 ALPHA (W) AMYLASE#

39794 BACILLUS
459035 MUTA?
105346 VARIANT#
L6 147 ALPHA(W) AMYLASE# AND BACILLUS AND (MUTA? OR VARIANT#)

FILE 'HCAPLUS'
1667631 ALPHA
48467 AMYLASE#
20586 ALPHA(W) AMYLASE#
94692 BACILLUS
555586 MUTA?
119653 VARIANT#
L7 527 ALPHA(W) AMYLASE# AND BACILLUS AND (MUTA? OR VARIANT#)

FILE 'NTIS'
29253 ALPHA
167 AMYLASE#
63 ALPHA(W) AMYLASE#
1803 BACILLUS
10290 MUTA?
4776 VARIANT#
L8 1 ALPHA(W) AMYLASE# AND BACILLUS AND (MUTA? OR VARIANT#)

FILE 'ESBIOBASE'
255425 ALPHA
5294 AMYLASE#
2565 ALPHA(W) AMYLASE#
19312 BACILLUS
286317 MUTA?
52458 VARIANT#
L9 95 ALPHA(W) AMYLASE# AND BACILLUS AND (MUTA? OR VARIANT#)

FILE 'BIOTECHNO'
189431 ALPHA
4194 AMYLASE#
2130 ALPHA(W) AMYLASE#
19958 BACILLUS
242571 MUTA?
41198 VARIANT#
L10 108 ALPHA(W) AMYLASE# AND BACILLUS AND (MUTA? OR VARIANT#)

FILE 'WPIDS'
195259 ALPHA
8613 AMYLASE#
3117 ALPHA(W) AMYLASE#
16771 BACILLUS
35381 MUTA?
32200 VARIANT#
L11 150 ALPHA(W) AMYLASE# AND BACILLUS AND (MUTA? OR VARIANT#)

TOTAL FOR ALL FILES
L12 2266 ALPHA(W) AMYLASE# AND BACILLUS AND (MUTA? OR VARIANT#)

=> s (168 or 169 or 170 or 171 or 172 or 173 or 174) (10a) (residue# or position# or
amino acid# or muta?)

FILE 'MEDLINE'
16027 168
12615 169
24119 170
12569 171
13021 172
12372 173
14250 174
207138 RESIDUE#
235574 POSITION#

641168 AMINO
1673685 ACID#
577018 AMINO ACID#
(AMINO (W) ACID#)
545303 MUTA?
L13 4086 (168 OR 169 OR 170 OR 171 OR 172 OR 173 OR 174) (10A) (RESIDUE#
OR POSITION# OR AMINO ACID# OR MUTA?)

FILE 'SCISEARCH'
13309 168
9929 169
27122 170
9970 171
10576 172
10371 173
10410 174
219871 RESIDUE#
330242 POSITION#
406614 AMINO
1386177 ACID#
316798 AMINO ACID#
(AMINO (W) ACID#)
531007 MUTA?
L14 3703 (168 OR 169 OR 170 OR 171 OR 172 OR 173 OR 174) (10A) (RESIDUE#
OR POSITION# OR AMINO ACID# OR MUTA?)

FILE 'LIFESCI'
2894 168
1870 169
5159 170
1748 171
1905 172
1662 173
2026 174
94710 RESIDUE#
70188 POSITION#
174652 "AMINO"
352865 ACID#
150725 AMINO ACID#
("AMINO" (W) ACID#)
240791 MUTA?
L15 2313 (168 OR 169 OR 170 OR 171 OR 172 OR 173 OR 174) (10A) (RESIDUE#
OR POSITION# OR AMINO ACID# OR MUTA?)

FILE 'BIOTECHDS'
1141 168
579 169
1598 170
615 171
639 172
581 173
670 174
25984 RESIDUE#
15818 POSITION#
71259 AMINO
158837 ACID#
66316 AMINO ACID#
(AMINO (W) ACID#)
48660 MUTA?
L16 1391 (168 OR 169 OR 170 OR 171 OR 172 OR 173 OR 174) (10A) (RESIDUE#
OR POSITION# OR AMINO ACID# OR MUTA?)

FILE 'BIOSIS'
13764 168
9673 169

22748 170
9181 171
10071 172
9251 173
11756 174
246083 RESIDUE#
241314 POSITION#
543220 AMINO
1453725 ACID#
414155 AMINO ACID#
(AMINO(W)ACID#)
589670 MUTA?
L17 4412 (168 OR 169 OR 170 OR 171 OR 172 OR 173 OR 174) (10A) (RESIDUE#
OR POSITION# OR AMINO ACID# OR MUTA?)

FILE 'EMBASE'

11065 168
8855 169
19013 170
8098 171
8590 172
7964 173
8884 174
181675 RESIDUE#
209851 POSITION#
446494 "AMINO"
1499115 ACID#
336701 AMINO ACID#
("AMINO" (W)ACID#)
459035 MUTA?
L18 3570 (168 OR 169 OR 170 OR 171 OR 172 OR 173 OR 174) (10A) (RESIDUE#
OR POSITION# OR AMINO ACID# OR MUTA?)

FILE 'HCAPLUS'

42195 168
28749 169
130489 170
27882 171
33321 172
29633 173
32239 174
670839 RESIDUE#
556377 POSITION#
1106319 AMINO
4819438 ACID#
704368 AMINO ACID#
(AMINO(W)ACID#)
555586 MUTA?
L19 7608 (168 OR 169 OR 170 OR 171 OR 172 OR 173 OR 174) (10A) (RESIDUE#
OR POSITION# OR AMINO ACID# OR MUTA?)

FILE 'NTIS'

1320 168
949 169
3259 170
957 171
1073 172
1266 173
1042 174
11365 RESIDUE#
51965 POSITION#
7047 AMINO
55897 ACID#
5175 AMINO ACID#
(AMINO(W)ACID#)

10290 MUTA?
L20 65 (168 OR 169 OR 170 OR 171 OR 172 OR 173 OR 174) (10A) (RESIDUE#
OR POSITION# OR AMINO ACID# OR MUTA?)

FILE 'ESBIOBASE'
5034 168
3620 169
8344 170
3473 171
3793 172
3485 173
3903 174
115522 RESIDUE#
86210 POSITION#
190712 AMINO
429941 ACID#
167034 AMINO ACID#
(AMINO(W)ACID#)
286317 MUTA?
L21 2401 (168 OR 169 OR 170 OR 171 OR 172 OR 173 OR 174) (10A) (RESIDUE#
OR POSITION# OR AMINO ACID# OR MUTA?)

FILE 'BIOTECHNO'
2509 168
1821 169
4814 170
1689 171
1867 172
1729 173
1973 174
96204 RESIDUE#
55352 POSITION#
204625 AMINO
371908 ACID#
173749 AMINO ACID#
(AMINO(W)ACID#)
242571 MUTA?
L22 2629 (168 OR 169 OR 170 OR 171 OR 172 OR 173 OR 174) (10A) (RESIDUE#
OR POSITION# OR AMINO ACID# OR MUTA?)

FILE 'WPIDS'
7173 168
2687 169
50100 170
5925 171
7301 172
3790 173
5502 174
204821 RESIDUE#
1528538 POSITION#
281507 AMINO
1119020 ACID#
100966 AMINO ACID#
(AMINO(W)ACID#)
35381 MUTA?
L23 2637 (168 OR 169 OR 170 OR 171 OR 172 OR 173 OR 174) (10A) (RESIDUE#
OR POSITION# OR AMINO ACID# OR MUTA?)

TOTAL FOR ALL FILES
L24 34815 (168 OR 169 OR 170 OR 171 OR 172 OR 173 OR 174) (10A) (RESIDUE#
OR POSITION# OR AMINO ACID# OR MUTA?)

=> s l12 and l24
FILE 'MEDLINE'
L25 4 L1 AND L13

FILE 'SCISEARCH'
L26 4 L2 AND L14

FILE 'LIFESCI'
L27 2 L3 AND L15

FILE 'BIOTECHDS'
L28 7 L4 AND L16

FILE 'BIOSIS'
L29 2 L5 AND L17

FILE 'EMBASE'
L30 2 L6 AND L18

FILE 'HCAPLUS'
L31 9 L7 AND L19

FILE 'NTIS'
L32 0 L8 AND L20

FILE 'ESBIOBASE'
L33 0 L9 AND L21

FILE 'BIOTECHNO'
L34 2 L10 AND L22

FILE 'WPIDS'
L35 5 L11 AND L23

TOTAL FOR ALL FILES
L36 37 L12 AND L24

=> dup rem 136
PROCESSING COMPLETED FOR L36
L37 21 DUP REM L36 (16 DUPLICATES REMOVED)

=> d tot 135

L35 ANSWER 1 OF 5 WPIDS COPYRIGHT 2007 THE THOMSON CORP on STN

TI Alpha-amylase variants especially for use in detergents or cleaning agents have a surface asparagine or glutamine residue exchanged to impart improved solvent stability
PI DE 102004047777 A1 20060413 (200630)* DE 54 [2]
WO 2006037484 A2 20060413 (200630) DE
RW: AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IS IT
KE LS LT LU LV MC MW MZ NA NL OA PL PT RO SD SE SI SK SL SZ TR TZ
UG ZM ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE
DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG
KM KP KR KZ LC LK LR LS LT LU LV LY MA MD MG MK MN MW MX MZ NA NG
NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SM SY TJ TM TN TR
TT TZ UA UG US UZ VC VN YU ZA ZM ZW
IN BESSLER C; MAURER K; MAURER K H; WIELAND S

L35 ANSWER 2 OF 5 WPIDS COPYRIGHT 2007 THE THOMSON CORP on STN

TI Modulating Sec-dependent protein secretion, comprises introducing a spoIIJJ or yqjG gene linked to an inducible promoter into a Bacillus cell and modulating the expression of the spoIIJJ or yqjG gene
PI WO 2003060068 A2 20030724 (200356)* EN 50 [8] C12N000-00
RW: AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR IE IT KE LS LU

MC MW MZ NL OA PT SD SE SI SK SL SZ TR TZ UG ZM ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK
DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR
KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT
RO RU SC SD SE SG SK SL TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA
ZM ZW

AU 2002353111 A1 20030730 (200421) EN
EP 1472342 A2 20041103 (200472) EN C12N005-02
R: AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LT LU LV MC
MK NL PT RO SE SI SK TR
US 20050170511 A1 20050804 (200552) EN C12P021-06
AU 2002353111 A8 20051020 (200615) EN C12N005-02
IN BRON S; TJALSMA H; VAN DIJL J M

L35 ANSWER 3 OF 5 WPIDS COPYRIGHT 2007 THE THOMSON CORP on STN

TI Variant of parent Termamyl-like alpha amylase
, useful in detergent compositions, for starch liquefaction, ethanol
production, washing and/or dish washing, and textile desizing
PI WO 2002010355 A2 20020207 (200232)* EN 90[1] C12N009-00
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ
NL OA PT SD SE SL SZ TR TZ UG ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK
DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR
KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU
SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
AU 2001078415 A 20020213 (200238) EN
US 20020155574 A1 20021024 (200273) EN C12N009-28
EP 1370648 A2 20031217 (200402) EN C12N009-28
R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR
JP 2004508815 W 20040325 (200422) JA 146 C12N015-09
CN 1529752 A 20040915 (200501) ZH C12N009-28
US 20050250663 A1 20051110 (200574) EN C12N009-28
AU 2001278415 A8 20051013 (200611) EN C12N009-28
IN ANDERSEN C; FUGLSANG C C; KJAERULFF S; KJARULFF S; THISTED T

L35 ANSWER 4 OF 5 WPIDS COPYRIGHT 2007 THE THOMSON CORP on STN

TI New nucleic acid encoding lipid acyl hydrolase proteins having pesticidal
activity, derived from rice, soybean, or wheat, for controlling insect
infestation and pathogenic infection in transgenic plants
PI WO 2001036468 A2 20010525 (200137)* EN 89[9] C07K014-00
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ
NL OA PT SD SE SL SZ TR TZ UG ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM
DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC
LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE
SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
AU 2001016129 A 20010530 (200152) EN
IN CIGAN A L

L35 ANSWER 5 OF 5 WPIDS COPYRIGHT 2007 THE THOMSON CORP on STN

TI Alpha-amylase variants and methods of
production - have altered properties such as calcium dependency,
substrate binding and stability
PI WO 9623874 A1 19960808 (199637)* EN 171[10]
RW: AT BE CH DE DK EA ES FR GB GR IE IT KE LS LU MC MW NL OA PT SD SE
SZ UG
W: AL AM AT AU AZ BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU IS
JP KE KG KP KR KZ LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT
RO RU SD SE SG SI SK TJ TM TR TT UA UG US UZ VN
AU 9644834 A 19960821 (199648) EN
BR 9607013 A 19971028 (199750) PT
EP 808363 A1 19971126 (199801) EN [0]

R: AT BE CH DE DK ES FR GB GR IE IT LI LU NL PT SE
MX 9705906 A1 19971001 (199901) ES C12N009-28
JP 11500003 W 19990106 (199911) JA 165 C12N015-09
KR 98701901 A 19980625 (199924) KO C12N009-28
US 5989169 A 19991123 (200002) EN
US 6022724 A 20000208 (200014) EN C12N009-28
US 6440716 B1 20020827 (200259) EN
CN 1172501 A 19980204 (200331) ZH
US 20030170769 A1 20030911 (200367) EN
US 20050019886 A1 20050127 (200509) EN
US 20050170487 A1 20050804 (200552) EN
KR 2005046778 A 20050518 (200641) KO
US 7115409 B1 20061003 (200665) EN
KR 511499 B 20051221 (200705) KO
US 7163816 B2 20070116 (200706) EN
IN BISGARD F H; BISGARD-FRANTZEN H; BISGARDFRANTZEN H; BORCHERT T; BORCHERT T
V; SVENSEN A; BISGAARD-FRANTZEN H

=> log y
COST IN U.S. DOLLARS SINCE FILE TOTAL
FULL ESTIMATED COST ENTRY SESSION
61.05 61.26

STN INTERNATIONAL LOGOFF AT 11:07:33 ON 21 FEB 2007